18

WO 2005/074853 PCT/DK2005/000083

CLAIMS

5

10

15

20

25

1. An electrically powered, rail-mounted patient or person lift, comprising: a carriage for displacement along an overhead rail and having a housing, said housing including:

an electric motor having an output shaft,

two belts suspended from said housing for the mounting of a patient or person support such as a sling or the like,

two belt-receiving rollers, each having an outer cylindrical surface for receiving a respective lifting belt and co-operating with said output shaft of said electrical motor for rotating in opposite directions at the same rotational speed driven by said output shaft, thereby collecting said belts when rotating said output shaft in the one direction and discharging said belts when rotating said output shaft in the opposite direction, and

a power supply unit for the delivery of electrical power to said electrical motor from a battery power supply or alternatively, a mains supply.

- 2. The lift according to claim 1, said electric motor being a DC motor and said power supply unit being a battery supply including one or more rechargeable batteries.
- 3. The lift according to claim 2, said one or more rechargeable batteries being housed within a battery power pack and being rechargeable by means of a separate main supply powered recharging station.
- 4. The lift according to any of the claims 2 or 3, said power supply unit including a monitoring circuit monitoring the capacity of said one or more rechargeable batteries for preventing said electric motor from being actuated provided said battery capacity is below a specific threshold.
- 5. The lift according to any of the claims 1-4, further including a remote control unit connected in a wired connection to said housing and/or communicating with said power supply unit through a wireless link.

30

19

WO 2005/074853 PCT/DK2005/000083

- 6. The lift according to claim 5, said remote control unit including said one or more rechargeable batteries.
- 7. The lift according to any other claim 1-6, said belt receiving rollers being journalled on respective journalling axles and having toothed wheels co-operating with a pinion of said output shaft.
- 8. The lift according to claim 7, said belt receiving rollers having two toothed wheels each sandwiching a respective belt receiving roller.
 - 9. The lift according to any of the claims 1-8, said belts being guided from said belt receiving rollers round positionable guiding pins.
- 10. The lift according to any of the claims 1-9, said housing being constituted by a two part housing having a top part including a pair of wheels for co-operating with said overhead rail and a bottom part including said electric motor and said two belt receiving rollers, said bottom part being journalled rotatably round a vertical axis relative to said top part.

20

11. The lift according to claim 10, said bottom part being connected to said top part through a bayonet like swivel connection allowing said bottom part to be disconnected from said top part.